

ABSTRACT

The present invention is a network system of radio base stations comprising base stations provided in a plurality of cells and a control station controlling the base stations, in which the base stations and the control station are connected by optical fibers using a wavelength multiplexing transmission method, wherein: the base station comprises a variable-wavelength transmitter for transmitting an optical signal having a predetermined wavelength, and an optical coupler for combining optical signals from the variable-wavelength transmitter in order to transmit the optical signals using the wavelength multiplexing transmission method, the control station comprises a plurality of optical receivers for receiving wavelengths of the optical signals transmitted using the wavelength multiplexing transmission method, and an optical coupler for splitting the wavelength-multiplexed optical signals transmitted from the base stations into the optical receivers by wavelength, and when the radio communication terminal communicating with the base station moves and changes the base station to communicate with, a new base station which communicates with the radio communication terminal after a movement of the radio communication terminal controls the wavelength of the variable-wavelength transmitter, and then transmits the optical signals to the control station with the same wavelength as one used for transmitting by a previous base station which communicates with the radio communication terminal before the movement.